

Bridging Feelings And Ventures: An Investigation Into The Mediating Role Of Entrepreneurial Behavior In Social Entrepreneurship

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Abstract

As global challenges intensify, social entrepreneurship—a unique blend of business and social problem-solving—becomes a beacon of innovation. Central to this fusion is empathy, the capacity to comprehend and share the feelings of others, which may profoundly impact one's social entrepreneurial intentions (SEI). This study scrutinized the intricate roles of entrepreneurial behavior (EB) in potentially amplifying or modulating this impact. Leveraging a stratified convenience sample, 393 students from a distinguished private, non-sectarian university provided insights via an online Google Forms survey. The data unraveled intriguing interplays: distinct components of empathy, especially emotional regulation, emerged as crucial drivers for SEI. Yet, their influence was most pronounced when mediated by EB. In particular, EB served as a bridge, fully channeling the effects of several empathy facets on SEI. On the other hand, despite initial presumptions, EB did not moderate the relationship, indicating that its role is more of a conduit than a modifier in the empathy-SEI nexus. This exploration sheds light on the multifaceted interrelationships between personal attributes and entrepreneurial intentions, offering valuable cues for educational institutions and entrepreneurship advocates.

Keywords: Social Entrepreneurship, Empathy, Entrepreneurial Behavior, Social Entrepreneurial Intentions, Emotional Regulation

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Introduction

In a contemporary global society characterized by its myriad challenges ranging from pressing environmental issues to persistent economic disparities, there has been a significant metamorphosis in the entrepreneurial landscape. Historically, entrepreneurship was predominantly perceived as an avenue for economic expansion and individual financial prosperity. However, the current epoch has borne witness to a paradigmatic shift, as an emergent category of entrepreneurs not only pursues economic gains but also commits to addressing sociocultural and environmental imperatives. This transformation culminates in what is today recognized as "social entrepreneurship."

Social entrepreneurship, as elucidated by Noruzi et al. (2010), emphasizes the objective of social value creation, placing it on par with, if not above, personal financial returns. This conceptual shift is a direct response to the exigencies of the modern era, synthesizing the strategic proficiency of a businessperson with the philanthropic inclinations of a societal benefactor.

An illustrative case of this burgeoning phenomenon can be observed in the Philippines, which has established itself as a notable locus of social entrepreneurial activity. Historically, the archipelagic nation's entrepreneurial spectrum in 2007 was limited, comprising approximately 30,000 social initiatives, predominantly in the form of cooperatives and associations, as documented by Sugeno and Yahata (2016). Remarkably, within a span of less than a decade, there was a precipitous expansion in this sector. By 2016, as cataloged by Flores (2017), the number of social enterprises burgeoned to approximately 164,000, with pronounced growth in domains such as agriculture, education, and business development. Such enterprises have proven indispensable in the nation's socio-economic fabric, catalyzing employment, facilitating the upliftment of marginalized sectors, and spearheading localized developmental initiatives.

The impetus behind an individual's foray into social entrepreneurship is multi-dimensional. Central to numerous such endeavors is a profound sentiment that transcends traditional business motivations—empathy. Empathy, the inherent human propensity to resonate with and act in response to the tribulations of others, serves as a fulcrum for many social entrepreneurial pursuits. When integrated with entrepreneurial intent, this empathy often culminates in initiatives striving to redress societal lacunae.

This discourse, anchored in the renowned Theory of Planned Behavior propounded by Ajzen (1991), endeavors to meticulously analyze the plethora of determinants influencing one's inclination towards social entrepreneurship. It is of paramount interest to dissect the interplay between individual attitudes, societal expectations, perceived behavioral control, and the overarching sentiment of empathy. Of particular significance is the current generation of university students. These young individuals, embodying fresh perspectives and latent potential, are increasingly gravitating towards this sector. The rationale behind this focal emphasis is corroborated by empirical observations from the Department of Trade and Industry, which has highlighted a conspicuous surge in youth-centric entrepreneurial undertakings (Agoot, 2021).

This study endeavors to provide an in-depth comprehension of the motivations, aspirations, and determinants underpinning the drive of young aspirants toward social entrepreneurship. By illuminating these facets, the study augments the extant scholarly literature and furnishes invaluable insights for educators, policymakers, and mentors invested in nurturing the next generation of social entrepreneurs. The intent is to shape an economically robust, socially equitable, and environmentally sustainable future.

Review of Literature and Hypothesis Development

The multifaceted nature of empathy, particularly its nuanced components, has been deeply explored in relation to social entrepreneurial intentions. Segal et al. (2011a) introduced the Empathy Assessment Index, which bifurcates empathy into five distinct components: affective response, self-other awareness, emotion regulation, affective mentalizing, and perspective-taking. Each of these components resonates with both cognitive and affective dimensions of empathy as highlighted by researchers like Mehrabian and Epstein (1972), Davis (1983), Batson et al. (1987), and Decety and Jackson (2004). Notably, studies such as those by Bacq and Alt (2018), and Usman et al. (2021) emphasized the positive correlation between individuals with high empathic tendencies and their predilection towards social entrepreneurial endeavors. Moreover, younger demographics, influenced by heightened empathy, demonstrated stronger social entrepreneurial intentions, as observed by Liu et al. (2019) and Osei et al. (2020). It is thus hypothesized that the diverse aspects of empathy significantly affect social entrepreneurial intentions.

H₁ - H₆: *Affective response (H₁), Self-other awareness (H₂), Emotion regulation (H₃), Affective mentalizing (H₄), Perspective taking (H₅), and Empathy (H₆) significantly affect social entrepreneurial intentions.*

The influence of empathy's nuanced components on entrepreneurial behavior is a subject of interest, given the potential interplay between emotional understanding and the drive to initiate ventures. Segal et al. (2011a) Empathy Assessment Index elucidates how dimensions such as affective response and self-other awareness might be pivotal in shaping one's attitudes and beliefs towards entrepreneurship. Specifically, the ability for emotion regulation can be crucial for budding entrepreneurs, allowing them to navigate the unpredictabilities and challenges of the entrepreneurial journey. Furthermore, affective mentalizing and perspective-taking provide individuals with the capability to understand their target audience and stakeholders, thus possibly shaping their strategies and actions in the entrepreneurial realm. Although the reviewed literature predominantly addresses the implications of these components on social entrepreneurial intentions, one can infer their significance in determining entrepreneurial behavior more broadly.

H₇ - H₁₂: *Affective response (H₇), Self-other awareness (H₈), Emotion regulation (H₉), Affective mentalizing (H₁₀), Perspective taking (H₁₁), and Empathy (H₁₂) significantly affect Entrepreneurial behavior.*

Entrepreneurial behavior, rooted in the Theory of Planned Behavior (Ajzen, 1991), encompasses attitudes, beliefs, and intentions crucial to initiating ventures. Within this framework, entrepreneurial behavior serves as a potential conduit through which the components of empathy influence social entrepreneurial intentions. Studies suggest that individuals with heightened empathic tendencies, particularly those rooted in these components, exhibit greater intentions for social actions and initiatives (Hockerts, 2017). However, the exact trajectory from empathy to social entrepreneurial intentions might be intricately woven through entrepreneurial behavior. Bacq and Alt (2018) have evidenced that empathic individuals tend to foster deeper connections with society, implying a strong motivation towards social entrepreneurship. The relationship between empathy components and social entrepreneurial intentions may be amplified or modulated by entrepreneurial behavior, serving as an intermediary step linking these constructs. This mediation implies that the path from empathic understanding to the intention of launching socially conscious ventures might be significantly influenced by one's attitudes, beliefs, and perceived controls associated with entrepreneurship. And thus, the following hypotheses:

H₁₃ - H₁₈: *Entrepreneurial behavior mediates the effect of Affective response (H₁₃), Self-other awareness (H₁₄), Emotion regulation (H₁₅), Affective mentalizing (H₁₆), Perspective taking (H₁₇), or Empathy (H₁₈) on Social entrepreneurial intentions.*

Entrepreneurial behavior, underpinned by the Theory of Planned Behavior (Ajzen, 1991), is centered on the interplay of subjective norms, personal attitude, and perceived behavioral control. These constructs have been found to critically influence one's predisposition to entrepreneurship. Drawing from Segal et al. (2011a) Empathy Assessment Index, which methodically breaks down empathy into key dimensions such as affective response, self-other awareness, emotion regulation, affective mentalizing, and perspective-taking, it is evident that empathy's influence on social entrepreneurial intentions is multifaceted. However, the direct impact of these empathic dimensions on social entrepreneurial intentions may be contingent upon an individual's entrepreneurial behavior. Ruiz-Rosa et al. (2020) and other studies have asserted that entrepreneurial behavior functions as an antecedent to social entrepreneurial intentions, suggesting that it might serve as a modulatory factor. In essence, while empathic tendencies, as highlighted by Bacq and Alt (2018), can push an individual towards social-centric ventures, the strength and direction of this push might be adjusted or redirected by the nuances of one's entrepreneurial behavior, indicating a potential moderating effect. The individual's beliefs about entrepreneurship, as shaped by societal norms, personal evaluations, and perceived controls, could accentuate, diminish, or even reshape the way empathic dimensions translate into social entrepreneurial intentions. Thus, we hypothesize that entrepreneurial behavior moderates the effects of empathy on social entrepreneurial intentions.

H₁₉ – H₂₄: *Entrepreneurial behavior moderates the effect of Affective response (H₁₉), Self-other awareness (H₂₀), Emotion regulation (H₂₁), Affective mentalizing (H₂₂), Perspective taking (H₂₃), or Empathy (H₂₄) on Social entrepreneurial intentions.*

Materials and Methods

The primary goal of this research was to understand the influence of empathy on Social Entrepreneurial Intentions (SEI) among undergraduate students at a private, non-sectarian university in the Philippines. A quantitative approach, renowned for its systematic collection and analysis of numerical data through tools like online surveys and polls, was the chosen method (Apuke, 2017). The research's underlying foundations were two intertwined designs: causal, which explicates cause-effect relationships; and descriptive,

which provides a snapshot of the characteristics of a specific population.

In the context of this study, the causal design aimed to decode how empathy might impact SEI, while the descriptive design helped gauge the baseline attributes and perceptions of the participants about SEI and their entrepreneurial behavior (EB).

Focusing on the academic year 2021-2022, the research targeted a private, non-sectarian university's undergraduate students with a population totaling 18,881 individuals. These students, with their array of demographics like age, gender, degree program, and associated college, are often perceived as a promising group with substantial entrepreneurial potential, especially in the thriving domain of social enterprises in the Philippines.

However, due to stringent data privacy measures, direct solicitation was avoided. Instead, a voluntary participation approach, or convenience sampling, was employed, presenting its own challenges in terms of generalizing the results (Edgar & Manz, 2017). To capture a representative slice of the university's diverse student population spread across seven colleges, stratified sampling came into play. By applying Slovin's formula, the research settled on a sample size of 393 students, with proportional representation from each college.

The primary medium for data collection was an online questionnaire hosted on Google Forms. This survey, comprising 46 questions (44 quantitative and 2 qualitative), was meticulously crafted drawing inspiration from past research but tailored to fit the specific context of this study. Before delving into the main survey, participants encountered a consent form, outlining the purpose of the research and assuring them of utmost confidentiality.

The survey itself spanned across several sections. Initial sections captured demographic details, vital for verifying the sample's representation of the wider student body. The subsequent sections, equipped with a 6-point Likert scale, drilled down into the core research variables: empathy, EB, and SEI. These sections, with questions adapted from Liñan and Chen (2009), Segal et al. (2011a), and Wang et al. (2014), aimed to glean insights into the participants' perspectives on the interplay between empathy, their entrepreneurial behaviors, and their social entrepreneurial intentions.

Before the full-blown research execution, a preliminary pilot study, involving 30 participants, was undertaken to gauge the reliability of

the survey tool. By harnessing the Cronbach's alpha test, internal consistency levels of the various questionnaire components were assessed and found to range between "Acceptable" to "Excellent".

In essence, this comprehensive research, through its robust quantitative design, set out to uncover the nuances of the relationship between empathy and SEI among the university undergraduates, with a keen focus on the role of EB as a potential moderator. Leveraging both convenience and stratified sampling, the study gathered insights from 393 students using an online survey instrument, vetted for its reliability, hoping to shed light on the intricate dynamics of empathy and SEI among the future entrepreneurs of the Philippines.

Results

Descriptive Analysis

The overall empathy of students polled in this study was demonstrated to a high extent which supports previous literature towards the empathic levels of students (Depow et al., 2021; Fumiano, 2019; Qi et al., 2020; Stefan et al., 2021). Though the empathic levels of students are generally high, some components of empathy based on the Empathy Assessment Index need more emphasis for improvement such as emotion regulation and self-other awareness. The study of Decety and Moriguchi (2007) mentions that emotion regulation may be different among people due to having their own strategies when dealing with emotions. Hence, healthy strategies to improve emotions such as more social and physical activities are ways to improve such components (Rolston & Richardson, 2014).

Moreover, entrepreneurial behavior is generally high among students which also supported previous literature (Aloulou, 2016; Ajzen, 2020; Luan & Lin, 2020). Despite this, the perceived behavioral control among students showed the lowest component of entrepreneurial behavior which contradicts the assumption of Ajzen (1985) that it is the strongest measure of behavior. Given this, more emphasis should be given to preparing the students with the necessary tools and knowledge on starting an enterprise to foster a higher entrepreneurial behavior among themselves.

Lastly, the social entrepreneurial intention among students is seen at a fairly high extent, which is the lowest among the other variables of the study. The study of Chang et al. (2021) emphasized that the social entrepreneurial intentions of students differ depending on their respective major or field of study which was supported in this study. Moreover, universities should focus more on increasing social awareness among students through both academic and extra-

curricular activities to increase the social entrepreneurial of students (Ashraf, 2020; Kruse, 2020; Tan et al., 2020; Tiwari, 2017). The results of the descriptive statistics are seen in the table below.

Table 1. *Summary of statistics for the variables of the study*

Component	Mean	SD	Interpretation
Affective Response	5.20	0.60	The level of Affective Response is very high
Emotion Regulation	3.91	0.90	The level of Emotion Regulation is fairly high
Affective Mentalizing	4.77	0.79	The level of Affective Mentalizing is high
Perspective-Taking	5.11	0.57	The level of Perspective-Taking is high
Self-Other Awareness	4.65	0.76	The level of Self-Other Awareness is high
Empathy	4.73	0.46	The level of Empathy is high
Subjective Norm	5.28	0.75	The level of Subjective Norm is very high
Personal Attitude	4.57	1.07	The level of Personal Attitude is fairly high
Perceived Behavioral Control	3.51	1.11	The level of Perceived Behavioral Control is fairly high
Entrepreneurial Behavior	4.45	0.77	The level of Entrepreneurial Behavior is high
Social Entrepreneurial Intentions	4.12	1.02	The level of Social Entrepreneurial Intentions is fairly high

Mediation Analysis

Affective Response (AR) to Social Entrepreneurial Intentions (SEI): The direct effect without the mediator, entrepreneurial behavior (EB), demonstrates that for every unit increase in AR, there is an associated 0.378 unit increase in SEI ($t = 4.55, p < .001$). When AR is used to predict EB, a unit increase in AR correlates with a 0.264 unit increase in EB ($t = 4.18, p < .001$). When EB is introduced as a mediator, the direct effect of AR on SEI drops to 0.180 ($t = 2.573, p = 0.01$). Additionally, EB robustly predicts SEI with a coefficient of 0.751 ($t = 13.702, p < .001$). The total effect of AR on SEI is thus 0.378. The indirect (mediated) effect of AR on SEI via EB is significant (0.198, $Z = 4.01, p < .001$).

Table 2 *Mediation results for AR predicting SEI mediated by EB*

Dependent	Independent	B	SE	t	p
Regression 1:					
SEI	AR	0.378	0.0831	4.55	< .001*
Regression 2:					
EB	AR	0.264	0.0631	4.18	< .001*
Regression 3:					
SEI	AR	0.180	0.0699	2.573	0.01*
	EB	0.751	0.0548	13.702	< .001*

* significant at $\alpha = .05$

Emotion Regulation (ER) to SEI: Directly, ER negatively predicts SEI, but this relationship isn't statistically significant ($B = -0.0125, t = -0.22, p = 0.826$). ER positively and significantly predicts EB ($B = 0.145, t =$

3.42, $p < .001$). When accounting for the mediator, EB strongly predicts SEI ($B = 0.806$, $t = 14.83$, $p < .001$), while the influence of ER on SEI becomes more negative and significant ($B = -0.13$, $t = -2.8$, $p = 0.005$).

Table 3 Mediation results for ER predicting SEI mediated by EB

Dependent	Independent	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Regression 1:					
SEI	ER	-0.0125	0.057	-0.22	0.826
Regression 2:					
EB	ER	0.145	0.0425	3.42	< .001*
Regression 3:					
SEI	ER	-0.13	0.0463	-2.8	0.005*
	EB	0.806	0.0543	14.83	< .001*

* significant at $\alpha = .05$

Perspective Taking (PT) to SEI: Without the mediator, PT positively and significantly predicts SEI ($B = 0.351$, $t = 3.99$, $p < .001$). PT also predicts EB positively ($B = 0.328$, $t = 4.99$, $p < .001$). After introducing EB as a mediator, PT's direct effect on SEI becomes non-significant ($B = 0.101$, $t = 1.35$, $p = 0.178$). The indirect effect of PT on SEI through EB is significant (0.198, $Z = 4.7$, $p < .001$).

Table 4 Mediation results for PT predicting SEI mediated by EB

Dependent	Independent	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Regression 1:					
SEI	PT	0.351	0.088	3.99	< .001*
Regression 2:					
EB	PT	0.328	0.066	4.99	< .001*
Regression 3:					
SEI	PT	0.101	0.075	1.35	0.178
	EB	0.762	0.056	13.691	< .001*

* significant at $\alpha = .05$

Self-Other Awareness (SOA) to SEI: Without mediation, SOA predicts SEI significantly ($B = 0.285$, $t = 4.33$, $p < .001$). SOA also has a positive relationship with EB ($B = 0.317$, $t = 6.55$, $p < .001$). However, with EB as a mediator, SOA's influence on SEI becomes non-significant ($B = 0.042$, $t = 0.727$, $p = 0.467$). The indirect effect of SOA on SEI through EB is robust (0.243, $Z = 5.91$, $p < .001$).

Table 5 Mediation results for SOA predicting SEI mediated by EB

Dependent	Independent	B	SE	t	p
Regression 1:					
SEI	SOA	0.285	0.066	4.33	< .001*
Regression 2:					
EB	SOA	0.317	0.048	6.55	< .001*
Regression 3:					
SEI	SOA	0.042	0.057	0.727	0.467
	EB	0.767	0.057	13.475	< .001*

* significant at $\alpha = .05$

Affective Mentalizing (AM) to SEI: AM significantly predicts SEI without the mediator ($B = 0.211$, $t = 3.280$, $p = 0.001$). AM's effect on EB is also significant ($B = 0.202$, $t = 4.200$, $p < .001$). With EB mediating, AM's direct effect on SEI becomes non-significant ($B = 0.055$, $t = 1.030$, $p = 0.305$). The mediated effect is statistically significant (0.155 , $Z = 4.030$, $p < .001$).

Table 6 Mediation results for AM predicting SEI mediated by EB

Dependent	Independent	B	SE	t	p
Regression 1:					
SEI	AM	0.211	0.064	3.280	0.001*
Regression 2:					
EB	AM	0.202	0.048	4.200	< .001*
Regression 3:					
SEI	AM	0.055	0.054	1.030	0.305
	EB	0.768	0.055	13.920	< .001*

* significant at $\alpha = .05$

Empathy to SEI: The total effect of empathy on SEI is 0.5142 ($Z = 4.721$, $p < .001$). The indirect effect of empathy on SEI through EB is significant and strong (0.4637 , $Z = 6.621$, $p < .001$). However, when EB is accounted for, the direct effect of empathy on SEI is not significant ($B = 0.0505$, $Z = 0.522$, $p = 0.602$).

Table 7 Mediation results for Empathy predicting SEI mediated by EB

Dependent	Independent	B	SE	t	p
Regression 1:					
SEI	Empathy	0.514	0.109	4.710	< .001*
Regression 2:					
EB	Empathy	0.603	0.0792	7.610	< .001*
Regression 3:					
SEI	Empathy	0.051	0.0972	0.520	0.603
	EB	0.769	0.0579	13.282	< .001*

* significant at $\alpha = .05$

In summary, the mediating effect of entrepreneurial behavior plays a significant role in the relationship between various predictors (AR, PT, SOA, AM, and Empathy) and social entrepreneurial intentions. The results are seen in the table below.

Table 8 *Summary of mediated regression results*

Variable	Effect	Estimate	SE	Z	p
Affective Response	Indirect	0.198	0.0494	4.01	<.001*
	Direct	0.180	0.0696	2.58	0.01*
Emotion Regulation*	-	-	-	-	-
Perspective Taking	Indirect	0.198	0.0532	4.7	<.001*
	Direct	0.180	0.0744	1.36	0.175
Self-Other Awareness	Indirect	0.243	0.0412	5.91	<.001*
	Direct	0.042	0.0572	0.73	0.465
Affective Mentalizing	Indirect	0.155	0.039	4.030	<.001*
	Direct	0.055	0.054	1.030	0.302
Overall Empathy	Indirect	0.4637	0.07	6.621	<.001*
	Direct	0.0505	0.0968	0.522	0.602

*significant at $\alpha = .05$.

Emotion Regulation failed to meet the criteria for Baron & Kenny's mediation analysis

The mediation results showed that affective response supported a partial mediation and emotion regulation did not support mediation while perspective taking, self-other awareness, affective mentalizing, and empathy supported a full mediation. The findings showed that only affective response can be used to directly determine the social entrepreneurial intentions of students while all other components of empathy (excluding emotion regulation) are used only to determine the entrepreneurial of behavior as it will indirectly lead to an increase in social entrepreneurial intentions. The results of the mediation analysis mostly supported previous studies (Bacq & Alt, 2018; Cop et al., 2020; Geangu et al., 2011; Gonzalez et al., 2019; Hoskins, 2021; Liu et al., 2019; Segal et al., 2017; Thieleman & Cacciatore, 2019; Zhang & Cain, 2017). This, along with the suggestions of the respondents of the study, emphasized on improving the lowest descriptors of the components of empathy from the Empathy Assessment Index such as putting oneself on the shoes of others through more social interaction for affective response, establishing a better understanding of one's emotions and feelings through proper anger management and emotional control for emotion regulation, being able to communicate and open up one's feelings to other people for self-other awareness, enhancing one's cognitive imagery through more social activities and

immersion for affective mentalizing, and immersing themselves towards other's experiences either through real-life experiences or reading literary materials for perspective taking. Although no mediation was seen for emotion regulation, it should still be given emphasis since it is an essential component for the overall empathy, which showed a full mediation when predicting social entrepreneurial intention mediated by entrepreneurial behavior.

Moderated Regression Analysis

In line with the criteria laid out by Netemeyer (2001) for establishing moderation, we examined two critical conditions. Firstly, empathy must significantly predict SEI in a simple regression model. The second condition requires that the interaction model, which predicts SEI using empathy, EB, and their interaction, should exhibit a higher coefficient of determination (R^2) than a multiple regression model solely comprising empathy and EB. The absence of any of these conditions negates the possibility of moderation. The results of this moderation analysis are provided in Table 40.

Table 9 Moderation analysis for Empathy predicting SEI moderated by EB

Predictor	B	SE	t	p	R ²
Simple Linear Regression Model					
Intercept	1.69	0.52	3.25	.001*	
Empathy	0.51	0.11	4.71	< .001*	
Multiple Linear Regression Model					
Intercept	0.45	0.44	1.03	.305	
Empathy	0.05	0.10	0.52	.603	
EB	0.77	0.06	13.28	< .001*	
Interaction Model					
Intercept	4.11	0.04	93.09	< .001*	
Empathy	0.05	0.10	0.52	.602	
EB	0.77	0.06	13.28	< .001*	
Empathy*EB	0.06	0.12	0.50	.620	
* significant at $\alpha = .05$					

In the simple linear regression model, empathy was found to significantly predict SEI, with $B = 0.51$, $t(391) = 4.71$, $p < .001$. This confirms the fulfillment of the first condition for moderation.

The R^2 values of the multiple regression model and the interaction model were 0.348 and 0.344 respectively. To discern whether the interaction model accounted for significantly more variance than the multiple regression model, a partial F-test was conducted. The results

revealed an $F(1,389) = 0.25$, $p = .620$, indicating that the variance explained by the interaction model ($R^2 = 0.344$) was not statistically different and was actually slightly lower than that of the multiple regression model ($R^2 = 0.348$).

In light of these findings, it can be inferred that while the first condition for moderation was satisfied, the second was not. Empathy's significant prediction of SEI meets the first criterion, but the lack of a significant increase in variance explained by introducing the interaction term in the model does not support the second condition. Thus, moderation isn't substantiated in this context, indicating that EB doesn't modify the relationship between empathy and SEI in a statistically meaningful manner.

Table 10 Summary of Results for Hypothesis Testing

Number	Hypothesis	Result
H₁ - H₆	<i>Affective response (H₁), Self-other awareness (H₂), Emotion regulation (H₃), Affective mentalizing (H₄), Perspective taking (H₅), and Empathy (H₆) significantly affect social entrepreneurial intentions.</i>	Supported except for Emotion Regulation
H₇ - H₁₂	<i>Affective response (H₇), Self-other awareness (H₈), Emotion regulation (H₉), Affective mentalizing (H₁₀), Perspective taking (H₁₁), and Empathy (H₁₂) significantly affect Entrepreneurial behavior.</i>	Supported
H₁₃ - H₁₈	<i>Entrepreneurial behavior mediates the effect of Affective response (H₁₃), Self-other awareness (H₁₄), Emotion regulation (H₁₅), Affective mentalizing (H₁₆), Perspective taking (H₁₇), or Empathy (H₁₈) on Social entrepreneurial intentions.</i>	Supported except for Emotion Regulation
H₁₉ - H₂₄	<i>Entrepreneurial behavior moderates the effect of Affective response (H₁₉), Self-other awareness (H₂₀), Emotion regulation (H₂₁), Affective mentalizing (H₂₂), Perspective taking (H₂₃), or Empathy (H₂₄) on Social entrepreneurial intentions.</i>	Not Supported

Discussion

The dynamic relationship between empathy, entrepreneurial beliefs (EB), and social entrepreneurial intention (SEI) forms the bedrock of our investigation. It provides a deeper exploration into how emotional competencies interface with cultivated entrepreneurial beliefs, furthering our understanding of the nuanced interplay of these critical variables. This section offers insights that bridge the findings of this study with existing literature while articulating the theoretical nuances embedded within them.

Empathy and SEI: The Mediated Relationship

The initial foray into this investigation was spurred by a simple yet profound question: Does empathy, the ability to vicariously experience and resonate with others' emotions, correlate with SEI? On the surface, the answer might seem evident—empathetic individuals are, in theory, more inclined to address societal challenges, possibly through entrepreneurial ventures. However, what our study unveils is the intricate role EB plays in mediating this relationship.

Echoing the findings of Liu et al. (2019), and Tan et al. (2020), our research reaffirms the direct relationship between empathy and SEI. Yet, it is when EB enters the equation that the landscape becomes more intricate. EB, characterized by one's attitudes and beliefs about entrepreneurship, emerges not just as a mediator, but almost as a lens through which empathy influences SEI. It's as if empathy provides the initial impulse, the inner drive, but it's through the sieve of one's entrepreneurial beliefs that this drive gets channeled into a genuine intention to pursue social entrepreneurship.

A fascinating offshoot of this mediated relationship is that the direct effect of empathy on SEI becomes nebulous when EB acts as a mediator. This full mediation underscores the paramount role of entrepreneurial beliefs. It isn't mere empathy that drives SEI, but rather how this empathy gets translated through one's beliefs and attitudes about entrepreneurship. The direct link between empathy and SEI is overshadowed by the indirect relationship, wherein empathy informs EB, which in turn shapes SEI.

The Role of EB: Mediator, Not Moderator

While the mediating role of EB in the relationship between empathy and SEI became evident, another dimension of our research explored if EB also moderates this relationship. A moderator, in essence, would alter the strength or direction of the correlation between empathy and SEI. Herein lies an intriguing revelation. Contrary to what one might expect, EB does not moderate the relationship between empathy and SEI. This suggests that while EB plays a pivotal role in channeling how empathy influences SEI, the strength of this influence remains consistent, regardless of the magnitude of one's entrepreneurial beliefs.

Supporting this, the study of Tsai and Fong (2011) revealed similar non-interacting dynamics of EB in different contexts, suggesting that the role of EB may be more consistent as a mediator than as a moderator across diverse scenarios.

Empathy as a Cultivable Trait and Its Implications on SEI

One of the more human-centric revelations of this study is the malleability of empathy. Often romanticized as an innate human trait, our research, echoing the sentiments of Frankel (2017), and Fuimano (2019), suggests that empathy can be nurtured and developed. This is particularly evident when respondents voiced avenues to cultivate empathy—ranging from increased exposure to societal issues, immersing oneself in literature and documentaries focused on human emotions, to adopting a more open-minded stance in interpersonal communications.

Such a perspective has profound implications. It implies that SEI, through its indirect relationship with empathy via EB, is not solely a consequence of inherent human attributes but can be influenced by shaping one's empathetic capacities.

Delving deeper, we identified certain demographic nuances. For instance, non-business degree students and those in the age bracket of 20-21 showcased comparatively lower levels of empathy. The implication here is twofold. On one hand, it points towards potential focal groups where interventions aimed at cultivating empathy could be most impactful. On the other, it raises pertinent questions—what factors in these demographics contribute to this empathy deficit? Is it the nature of their educational curriculum, external societal influences, or a combination of both?

The Multifaceted Landscape of SEI Determinants

Empathy and EB, despite their significance, are but pieces of a larger puzzle. With these variables accounting for 34.8% of SEI's variance, it's evident that SEI is a product of a plethora of influences. While our study sheds light on a critical slice of this multifaceted construct, SEI, in its entirety, remains a rich tapestry woven with threads of personal experiences, cultural nuances, socioeconomic backgrounds, and perhaps even global events.

In bridging the findings of this study with the broader narrative on SEI, one realizes that the journey to comprehensively understand social entrepreneurial intention is layered and complex. However, by illuminating the relationship between empathy, EB, and SEI, our research offers a more refined perspective, laying a foundation upon which subsequent investigations can build.

Conclusions

The study was initiated with the aim of deciphering the intricate relationship between empathy, entrepreneurial beliefs (EB), and social

entrepreneurial intention (SEI) among students of a private, non-sectarian higher education institution. By utilizing statistical tools, notably Jamovi and JASP, and drawing from recognized literature for measurement protocols, the findings shed light on both converging and diverging narratives in this domain.

One significant discovery was the pronounced empathy levels exhibited by the students, as measured by the Empathic Ability Index (EAI) proposed by Segal et al. (2011a). This evidence suggests a majority of these students can adeptly recognize, mirror, and understand the emotional states of others. However, certain facets, particularly emotional responsiveness (ER), indicated room for further enhancement, pinpointing potential interventions to amplify overall empathy. Interestingly, while students aged 22-23 showcased elevated empathy, this trait was consistent across different courses and genders, indicating the overarching nature of empathic attributes.

Regarding social entrepreneurial intention (SEI), the student body of the institution displayed a commendable inclination. The research revealed that age, gender, or academic discipline didn't significantly sway this propensity. As prior work from scholars like Souitaris et al. (2007), and Akhter et al. (2020) suggests, a supportive educational environment can be a catalyst. Still, broader experiential factors, such as engagement with diverse communities and understanding societal challenges, are instrumental in molding SEI.

On the entrepreneurship spectrum, the surveyed students exhibited a pronounced affinity for entrepreneurial behaviors, particularly resonating with the concept of social norms when contemplating entrepreneurial ventures. This collective sentiment underscores the societal appeal and merit of entrepreneurship. Yet, in certain areas, notably perceived behavioral control (PBC), there's an identified need for augmentation. While variations in EB were discerned based on academic discipline, other factors such as age and gender remained relatively neutral, offering intriguing insights into the influences of academic structure and curriculum.

Probing further into the interrelationship of the variables, specific components of empathy, like affective responsiveness (AR), were revealed to have a unique association with SEI. Contrarily, components like perspective taking (PT), shared attention (SOA), and affective matching (AM) didn't exhibit a direct correlation unless mediated by EB. This reaffirmed the study's proposition that empathy, though integral, might not exert a direct influence on SEI absent the mediation of EB.

The mediating prowess of EB was distinctly highlighted, notably in its ability to bridge particular aspects of empathy with SEI. EB adeptly mediated the link between components such as SOA, AM, PT, and SEI. This underscores EB's centrality in this dynamic, suggesting that without its influence, certain empathic traits may lose their potency in predicting SEI.

Conversely, the study dispelled the anticipated moderating role of EB. There was no observed impact of EB on the strength or directionality between empathy and SEI, solidifying the hypothesis of its primary mediatory rather than modulatory function.

In essence, this research illuminates the dynamic interplay and relationships between empathy, EB, and SEI within the student community of a private, non-sectarian higher education institution, furnishing a more granulated understanding and opening the gateway for further scholarly and practical endeavors.

Implications for Social Entrepreneurship

Social entrepreneurship's ascent in contemporary discourse cannot be understated. Its *raison d'être*, addressing intricate social or environmental dilemmas through innovative business models, offers a beacon of hope in an increasingly complex global landscape. The shifting market dynamics, which now valorize sustainable, impactful, and community-centric solutions, have accelerated the rise of social entrepreneurs. However, what kindles the flame of social entrepreneurship in individuals?

Empathy stands out as a prominent precursor. The profound ability to resonate, feel, and comprehend the nuances of varied societal and environmental issues forms the bedrock of many social enterprises. It's not merely about recognizing an issue, but deeply feeling its reverberations and being driven to act upon it.

This research aimed to dissect and illuminate the interconnected web of empathy, entrepreneurial beliefs (EB), and social entrepreneurial intention (SEI). Prior studies have offered fragmented insights, sometimes pointing to a direct relationship between empathy and SEI, and at other times, revealing the mediatory might of EB. Yet, a holistic, fine-grained approach – such as the one we've undertaken using the nuanced Empathic Ability Index (EAI) – remained an academic desideratum.

Our findings confirm that empathy alone, though imperative, does not directly propel an individual towards SEI. It requires a catalyst, the

mediating role of entrepreneurial beliefs (EB), to translate this empathy into actionable entrepreneurial intentions. Such a realization is pivotal for the broader community of educators, social entrepreneurship proponents, and policymakers.

For institutions and educators, it implies a need to craft pedagogical interventions that not only enhance students' empathy levels but concurrently nurture their entrepreneurial beliefs. Traditional empathy-enhancing activities, such as community immersion, exposure to real-world societal challenges, or even cross-cultural engagements, can help students perceive the depth and breadth of issues more acutely. Particularly, our research points to the urgency of bolstering emotional responsiveness (ER) in aspiring social entrepreneurs. By equipping them with tools to better regulate emotions and manage mood fluctuations, we empower them to approach social challenges with both compassion and clarity.

However, exposure and empathy, while foundational, remain insufficient in isolation. The academic community must interlace empathy with a robust entrepreneurial mindset. It's about fostering a belief system where students, replete with empathy, are confident in their capabilities to instigate social change through entrepreneurship. They should be made to understand that while empathy can identify a problem, entrepreneurial aptitude and self-belief will be pivotal in devising solutions and implementing them.

It might be beneficial for entrepreneurship programs to amalgamate modules that bridge empathy with entrepreneurship. Workshops, case studies, or even live projects which guide students in identifying problems through empathetic lenses and then craft business strategies to mitigate them could be the way forward.

Furthermore, as we look beyond the academic precincts, these insights also reverberate for social entrepreneurship incubators and accelerators. In their cohort selection or nurturing processes, gauging, and grooming both empathy and entrepreneurial beliefs in tandem can prove beneficial.

In conclusion, this research emphasizes that the journey from feeling a problem to acting on it in the realm of social entrepreneurship is a tandem ride of empathy and entrepreneurial beliefs. Ensuring that both these facets are adequately fostered will be the lynchpin in shaping effective, impactful social entrepreneurs of tomorrow.

Limitations

The study, pioneering in its approach to understanding the interplay between empathy, entrepreneurial beliefs, and social entrepreneurial intentions, confronts several intrinsic constraints. The concept of empathy, foundational to our research, was based on the Empathy Assessment Index championed by Segal et al. (2011a). While this index offers an evolved understanding of empathy, it's critical to note that the construct of empathy, given its multifaceted nature, has been interpreted and dissected variably across different scholarly endeavors. The potential absence of a universally acknowledged granularity in delineating empathy might lead to nuanced variations when our findings are juxtaposed with other research outcomes.

Similarly, the operationalization of Social Entrepreneurial Intentions (SEI) was anchored in an eight-item measure, and while this might offer a detailed insight, it could also induce variations when compared to other standardized metrics. The blueprint we adopted for Entrepreneurial Behavior (EB) was inspired by the work of Liñan and Chen (2009), encapsulating subjective norms, personal attitude, and perceived behavioral control. Nonetheless, in the expansive domain of entrepreneurial studies, there are other facets to entrepreneurial behavior that might not have been entirely captured within our research framework.

Furthermore, our sampling methodology and demographic considerations present certain constraints. The study's respondents, comprising 393 students, predominantly mirror the student demographic of a private, non-sectarian higher education institution. This cohort, with its unique set of characteristics, might not be a comprehensive representation of the broader university student populace. The insights derived from this group, embedded in its specific cultural, educational, and social milieu, could potentially limit the wider applicability of our findings. The study's reliance on convenience sampling further underscores the need for a cautious interpretation. While this methodology offered adequacy in terms of sample size, its inherent non-random nature could introduce biases, making broader generalizations a challenging endeavor. The exclusive utilization of online surveys, in this case via Google Forms, as a data collection tool, due to extenuating circumstances, brings with it concerns related to response authenticity, potential biases, or even superficial respondent engagement.

Lastly, while the study ventured into relatively uncharted territories with its measurement constructs, there's an innate challenge in aligning its findings with antecedent research that employed diverse

measures. The innovative nature of our research framework might present some disparities when placed in a comparative analytical paradigm with established literature. Consequently, the study's findings should be interpreted with an added layer of circumspection, acknowledging these inherent limitations. Such a balanced approach not only facilitates judicious insights but also sets the stage for further research in the domain.

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